



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/776,376

02/11/2004

Carmen Flosbach

FA1179USNA

3929

23906

7590

05/08/2006

EXAMINER

NILAND, PATRICK DENNIS

E I DU PONT DE NEMOURS AND COMPANY
LEGAL PATENT RECORDS CENTER
BARLEY MILL PLAZA 25/1128
4417 LANCASTER PIKE
WILMINGTON, DE 19805

ART UNIT

PAPER NUMBER

1714

DATE MAILED: 05/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

5

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/776,376 | Applicant(s) FLOSBACH ET AL. | |
| | Examiner Patrick D. Niland | Art Unit 1714 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>8/05,2/04</u> . | 6) <input type="checkbox"/> Other: ____. |

Art Unit: 1714

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1-8 are rejected under 35 U.S.C. 102(a) as being anticipated by WO 03/106055 A1 Flosbach et al..

Flosbach discloses the instantly claimed invention at the abstract; page 3, lines 16-27; page 4 in its entirety; page 5 in its entirety, particularly the last full paragraph; page 6 in its entirety, particularly 13-30 of which the Michael adducts fall within the scope of the instantly claimed formula I where further reacted with polyisocyanate and OH functional acrylates, e.g. lines 13-18. Where the acrylate is hydroxyalkylacrylate, $a=1$, $b=0$ and $c=1$, the alkyl attached to the OH is R superscript 4 and also meets the limitations of formula II. The silicon amount of the abstract falls within the scope of the instant claim 2. The acryloyl groups fall within the scope of the instant claims 3-4 as would any unreacted NCO groups encompassed by Flosbach. The method of the above cited sections of pages 6 falls within the scope of that of the instant claim 5. Page 6, lines 10-12 appears to fall within the scope of the instant claim 6 in that the non-reacted NCO can subsequently react with the secondary NH groups remaining on the Michael adducted aminoalkyltrialkoxysilane residues according to step c of the instant claim 6 where "Some" of line 10 is such that excess unreacted polyisocyanate is present. The later discussed compositions of the reference fall within the scope of the instant claims 7 and 8 (abstract et seq.).

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 1714

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 03/106055 A1 Flosbach et al..

Flosbach discloses the instantly claimed invention at the abstract; page 3, lines 16-27; page 4 in its entirety; page 5 in its entirety, particularly the last full paragraph; page 6 in its entirety, particularly 13-30 of which the Michael adducts fall within the scope of the instantly claimed formula I where further reacted with polyisocyanate and OH functional acrylates, e.g. lines 13-18. Where the acrylate is hydroxyalkylacrylate, $a=1$, $b=0$ and $c=1$, the alkyl attached to the OH is R superscript 4 and also meets the limitations of formula II. The silicon amount of the abstract falls within the scope of the instant claim 2. The acryloyl groups fall within the scope of the instant claims 3-4 as would any unreacted NCO groups encompassed by Flosbach. The method of the above cited sections of pages 6 falls within the scope of that of the instant claim 5. Page 6, lines 10-12 appears to fall within the scope of the instant claim 6 in that the non-reacted NCO can subsequently react with the secondary NH groups remaining on the Michael adducted aminoalkyltrialkoxysilane residues according to step c of the instant claim 6 where "Some" of line 10 is such that excess unreacted polyisocyanate is present. The later discussed compositions of the reference fall within the scope of the instant claims 7 and 8 (abstract et seq.).

It would have at least been obvious to one of ordinary skill in the art at the time of the instant invention to make the polyurethaneureas of the instant claims by the methods of the instant claims 5-6 and the resulting compositions thereof from the disclosure of Flosbach because the reference encompasses these polyurethaneureas, methods of making, and

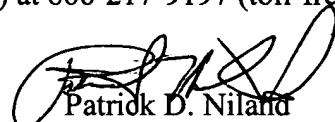
Art Unit: 1714

compositions thereof as stated above and they would have been expected to give the properties and products disclosed by the reference.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick D. Niland whose telephone number is 571-272-1121. The examiner can normally be reached on Monday to Thursday from 10 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Patrick D. Niland
Primary Examiner
Art Unit 1714